

BOROUGH OF WHITEHAVEN.

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

For the Year 1902.

30, CHURCH STREET, WHITEHAVEN,

February, 1903.

Gentlemen,

I have again to lay before you my Annual Report as Medical Officer of Health for the Borough of Whitehaven, being my Fifteenth Annual Report for the district, and the ninth since the incorporation of the Borough, with the usual tables of sickness and mortality for the year 1902, compared with previous years. In reckoning the various rates I have estimated the population of the Borough as 19,320, which is practically the population at the Census of 1901, and the same as estimated for the two previous years.

The total number of deaths registered in the Borough during the year 1902 was three hundred and ninety-six, which is equivalent to a death-rate of 20·49 per thousand per annum, and is 1·35 above the average of 19·14 for the preceding ten years. Thirty-two of these deaths, however, were those of “non-

residents," that is, persons not belonging to the Borough who died in the Whitehaven and West Cumberland Infirmary or in the Union Workhouse, and omitting these, and adding one death of a "resident," that is, a person belonging to the Borough who died in a Liverpool Workhouse, and whose death was therefore registered in Liverpool, we find the actual number of deaths at all ages and from all causes of persons belonging to the district to be three hundred and sixty-five for the year, equivalent to a nett death-rate of 18·89 per thousand per annum, which is 0·23 above the average of 18·66 for the previous ten years.

Six hundred and twenty-five births were registered during the year—three hundred and thirty-three boys and two hundred and ninety-two girls—which is equivalent to a birth-rate of 32·35 per thousand of population per annum, and 0·82 above the average of 31·53 per thousand per annum for the previous ten years. Six of the births—two boys and four girls—occurred in the Workhouse.

Seventy-nine deaths were registered during the year of infants under one year of age, giving an infant death-rate per thousand births registered of 126·4, which is 18·23 below the average of 144·63 for the preceding ten years; the infantile death-rate per thousand of estimated population being 4·09 for the year, which is 0·49 below the average of 4·58 for the preceding ten years.

Of children under five years of age—including the seventy-nine deaths of infants above mentioned—there were one hundred and thirty-seven deaths, equivalent to a death-rate of 7·09 per thousand per annum, or 0·59 below the average of 7·68 for the previous ten years.

Ninety-nine deaths of persons over sixty-five years of age were registered during the year, giving a Senile death-rate of 5·12 per thousand per annum, which is 1·48 above the average of 3·64 for the previous ten years.

From the eight principal Zymotic diseases shewn in Table VI., thirty deaths occurred during the year, equivalent to a Zymotic death-rate of 1·55 per thousand per annum, which is 0·88 below the average of 2·43 for the preceding ten years.

Thus we see that, whilst the general death-rate reckoned on the total deaths registered in the Borough is somewhat above the average of the previous ten years, the nett death-rate is very little above the average nett rate for those years, whilst the birth-rate is slightly above the average and the senile death-rate proportionately more above the average; the infant death-rate per thousand births registered, as well as per thousand of population, being below the average, as are also the death-rate of children under five years of age and the death-rate from Zymotic disease.

One hundred and nine cases were notified during the year under the Infectious Disease (Notification) Act, and of these forty-nine cases were removed to the Infectious Disease Hospital at Bransty.

Twenty-eight notifications of Diphtheria and three of Membranous Croup were received. Two of the cases of Diphtheria were removed to Hospital, as they occurred in a house in which there was a large family and no adequate means of isolation. The cause appeared to have been in these cases an offensive ash-pit used for the deposit of all kinds of filth, which formed a

tempting playground for the children, and was not cleaned out as frequently as was desirable. The patients were treated by injection of anti-diphtheria serum, and though severe cases with laryngeal symptoms when admitted to Hospital, made good recoveries. The ashpit was closed and arrangements made for the regular removal of the refuse. In some of the cases no direct cause could be assigned for the occurrence of the disease. In all cases careful inquiry was made, and the circumstances thoroughly investigated with a view of ascertaining whether the disease might be due to any insanitary condition or to infection from previous cases, as well as into the possibility of isolation at their own homes, or the necessity, in the interests of the public health, of the removal of the patients to Hospital. When necessary, as when old drains passed under houses, the smoke test was employed, and in this way some defects were discovered and remedied. Four of the cases were interesting etiologically from the fact that, though the sanitary condition of their own homes was quite satisfactory, the patients were found to have regularly frequented places where the drains were subsequently proved to be defective. Some of the cases notified were extremely mild, but the same care was exercised in these as in the more definite cases. At the termination of the case the rooms occupied by the patient, and all things likely to retain infection, were disinfected by the Sanitary Inspector.

Thirty-four cases of Scarlet Fever were notified, of which sixteen were removed to Hospital. One case suspected to be Scarlet Fever was removed to Hospital for observation, as it occurred in a small house in which there was a large family of children, but did not prove to be so. In two cases only were more

than one patient removed from the same house. In one of these two children were removed at the same time, in the other on consecutive days, so that the infection may be considered to have been simultaneous, and not derived the one from the other. No "return case" occurred. One case was admitted from the Workhouse.

Thirty-two cases of Enteric Fever were notified during the year. Thirty-one were removed to hospital. Sixteen of these cases were distinctly traceable to a common origin. At the end of February a case was notified in a house, No. 38, Senhouse Street, and a few days later four cases occurred at No. 37, as well as a second case at No. 38. On applying the smoke test to the drains, it was found that there was a defect in those of No. 37, permitting the escape of sewer gas into both houses. The drain consisted of earthenware socket pipes, and had become defective at the joints, probably owing to subsidence of the sandy soil. The drain, which unavoidably passes under No. 37, was immediately taken up and re-laid in a proper manner, but meanwhile other persons had become infected. A fifth case occurred a few days later at No. 37, making altogether seven cases in the two houses. On my first visit to No. 37 I found that about a gallon of milk was purchased daily from two milk carts, and re-sold in small quantities. This I immediately stopped. Three weeks later two cases, a mother and her four-year-old child, were notified in Church Street, and I learned that the mother had bought a small quantity of milk at No. 37, Senhouse Street, during the time that I was upstairs examining the patients on my first visit, this being the only occasion on which she had bought milk there. Another child in this family developed the disease in

a few days, as did also the father and the mother's brother, who lived with them. Simultaneously with the occurrence of the first case in Church Street, a case was notified in Lamb Lane, Duke Street, and it was found that this patient, a man aged thirty-eight, had partaken of milk obtained about the same time from the same source, this being also the only occasion on which he had done so. His son, aged seven years, developed the disease ten days later. Two other cases were notified during the same week as the earlier of these cases, one in New Street and one in Strand Street, and both these patients were found to have been in the habit of obtaining milk at No. 37, Senhouse Street. In none of these cases was there any other discoverable source of infection.

Of the remaining cases of Enteric Fever four occurred in houses in which the disease had existed during the latter part of 1901. Several were found to be due to defects in the private drains of the house in which they occurred, and in a few cases no adequate cause could be discovered, infection having probably occurred away from their own homes. In one or two cases, indeed, there was reason to suspect that impure water had been drunk by the patient whilst at work, and that the disease might be due to this cause, but this could not be definitely stated. After the removal of the patient to Hospital, the Sanitary Inspector, in each case, supervised the cleansing of the house, and himself disinfected the room occupied by the patient, either with sulphur fumes or the formalin lamp. Beds, mattresses, and the like were removed to Bransty for disinfection in the Reck's Steam Disinfecter, whilst bed clothes and similar articles were steeped in Perchloride of Mercury solution.

Twelve cases of Erysipelas were notified during the year. Many of these were of a trivial character, and none were due to insanitary conditions. The premises were, however, in each case, inspected to ascertain their sanitary condition.

At the end of the year there were no cases in the Infectious Disease Hospital, and the only cases of infectious disease in the Borough were one of Diphtheria and two of Scarlet Fever, one of the latter being in the Workhouse.

The regular inspection of the Borough, the inspection of ships in harbour, and of caravans and travelling shows which visit the town, have been continued during the year as heretofore. and in one of the accompanying tables a summary of the work done in the department of the Sanitary Inspector is given, though a large number of minor nuisances discovered and remedied on verbal notice given during our inspections do not appear in that table.

In previous reports I have referred to the difficulties experienced in Whitehaven in improving the housing of the poorer classes. I have said there are a large number of houses which I would unhesitatingly condemn, if only provision could be made for the people so displaced, but that, under existing circumstances, any wholesale closing of houses would result only in overcrowding those that remained, and which might be little better than those closed. A Committee of the Council has for some time been making a detailed examination of the numerous courts which form the worst feature of the existing condition of things, and a report may shortly be expected.

The suggestion to provide a Public Slaughter-house, which I have so often repeated, does not appear to find much favour with the Council. Perhaps the expense is the great objection to it. I think, however, the initial cost need not be extravagant, and that if it were generally used by the butchers, as I anticipate, it should be no great burden on the rates. It would certainly facilitate the inspection of carcasses intended for human food and the detection of unsound or diseased meat.

Another hardy annual is the proposed Public Mortuary. I have in former reports pointed out that not only is it a desirable thing that a town like Whitehaven should have a mortuary in which the bodies of persons found dead in the harbour or elsewhere might with decency be deposited, and, if required by the Coroner, a *post mortem* examination conducted, but that the bodies of persons dying from infectious disease may be removed on the certificate of the Medical Officer of Health to a public mortuary, where one exists, instead of being kept for several days in small, ill-ventilated houses at the risk of spreading the disease. These facts were so far recognised that, so long ago as March, 1900, a Mortuary Committee was appointed, and, in answer to an inquiry by the Local Government Board in September of the same year as to what steps were being taken to provide a public mortuary, it was stated that the matter was “under consideration.” A site was selected and plans prepared, but the work was not proceeded with. I think the subject one of sufficient importance to bring again under your notice, in order that you may consider whether some practical steps cannot be taken to make this very desirable provision.

The condition of the Cowsheds within the Borough has engaged the attention of your officials during the year. There are in all thirty-two cowsheds, occupied by twenty-three cow-keepers. Many of these are unsatisfactory as regards ventilation and in other particulars, and I think the whole subject should be thoroughly gone into, when it will probably be found advisable to amend the existing regulations, which are at present somewhat unworkable.

The four Common Lodging Houses in the Borough have been carefully inspected during the year with a view of improving their condition. Many defects were discovered, such as imperfect ventilation of sleeping rooms, inadequate lavatory accommodation, absence of ventilation for the soil pipes of water closets, the obliteration or removal of the notices that ought to be affixed shewing the number of lodgers that each room is registered to accommodate, and consequently more beds being placed in some rooms than they were originally registered for. Steps are being taken to deal with such of these defects as have not already been remedied. Notices were served on the occupiers to provide proper means of ventilation where these were inadequate; in some cases the necessary work has been completed, and the rest are receiving attention. The ventilation of soil pipes is being proceeded with, and lavatories are being provided. The rooms have all been re-measured by the Surveyor, and the number of lodgers permitted to sleep in each room fixed so as to allow a *minimum* of three hundred cubic feet of air space for each person, this allowance being considerably exceeded in many cases. In this way the authorised number of lodgers in the four houses has been reduced from one hundred and five to eighty-nine. Copies of the regula-

tions and notices shewing the number of lodgers for which each room is registered have been supplied to the occupiers of all the lodging houses.

The "Factory and Workshop Act, 1901," which came into operation on 1st January, 1902, imposed new powers and duties on the Town Council and their Medical Officer of Health. The Council is required to keep a Register of Workshops situate within the Borough. The Council may treat as a nuisance under the "Public Health Act, 1875," any workshop or workplace not kept in a cleanly state and free from effluvia from drains, closets, &c., and on the certificate of the Medical Officer of Health or Sanitary Inspector may order lime-washing or cleansing of workshops, and recover a penalty in default. Every person employed in a workshop must be allowed at least two hundred and fifty cubic feet of air space (or four hundred during overtime), and overcrowding of a workshop may be treated as a nuisance by the Town Council. Notices must be exhibited in certain cases specifying the number of persons to be employed in each room, and the Medical Officer of Health must notify the District Inspector of Factories whenever he becomes aware that any woman, young persons or child is employed in a workshop in which no abstract of this Act is posted up as required. Every workshop must be provided with sufficient means of ventilation, and sufficient ventilation must be maintained, otherwise it may be treated as a nuisance. Certain additional sanitary provisions for Bakehouses are included in the Act; there must be no drain-opening in the bakehouse, closets must not communicate directly with the bakehouse, lime-washing or painting must be done at stated intervals, all sleeping-rooms on the same floor must be completely partitioned off from the bakehouse,

and have external windows of a prescribed size which will open. No new retail bakehouse is to be started, the floor of which is more than three feet below the level of the roadway, and after January, 1904, no underground bakehouse is to continue to be used unless the Town Council gives a certificate of suitability. Lists of home workers are to be sent to the Town Council twice a year by the occupier of every factory or workshop in the case of all persons employed in certain classes of work, and the Council may prohibit the giving out of specified classes of work intended to be done in unwholesome dwellings, or dwellings where notifiable disease exists.

The Medical Officer of Health is required in his Annual Report to deal specifically with the administration of the Act, and to send a copy of his report to the Secretary of State. The Factory Inspector for the district may notify the Town Council of any sanitary defects he may discover, and it becomes the duty of the Council to make such inquiry and take such action as seems to them proper, and to inform the Inspector of the proceedings taken in consequence of the notice. The officers of the Town Council have the same power of entry, inspection, taking legal proceedings, or otherwise, with respect to workshops and workplaces as an inspector under the Act.

With a view to carrying out the provisions of the Act, the Sanitary Inspector and myself have thoroughly inspected the Borough, and entered in the "Register of Workshops" all places that seemed to come within its scope. We have also entered in the "Workshop Record Book" the necessary particulars of each workshop in regard to general cleanliness, effluvia or defects in

connection with closets, drainage, &c., necessity for lime-washing, dimensions of each room, permissible and actual number of employés, kind and efficiency of ventilation, and the like. We provided also a register of home-workers, but so far as we could ascertain there are not in the Borough any home-workers of the classes indicated in the Act, a list of whom is to be sent by the occupier of the factory or workshop to the Town Council.

Seventy-nine workshops were registered in the Borough during the year, employing three hundred and sixty-five persons—two hundred and twelve male and one hundred and fifty-three female workers.

There were seventeen dressmaking and millinery establishments. These were all found to be satisfactory as regards general cleanliness, freedom from effluvia from drains, and the like. The rooms were all carefully measured, and the number of employés in each noted, and it was found that in five there was overcrowding of particular rooms according to the standard fixed by the Act. Some of these, however, only required re-arrangement as other rooms on the same premises had not the full compliment of workers allowed by the Act. In other cases it was necessary to reduce the number of persons employed. In two cases the ventilation was found to be defective, but in each case the defect has been remedied in consequence of our representations to the owners. These establishments employed a total of one hundred and three female workers.

Eleven of the workshops registered were those of Tailors, and in these were employed forty-three male and five female workers. In two cases there was a want of general cleanliness, two required

lime-washing, in one there was overcrowding, and in two the ventilation was defective.

Ten Joiners' workshops were registered employing fifty-three male workers. One of these was in an uncleanly state, five required lime-washing, and in two cases the water closet on the premises was in a defective and dirty condition.

There were ten Cloggers' workshops in which twenty-six male workers were employed. In two of these the ventilation was found to be defective, and in one there was a defective water closet.

Two Shoemakers' workshops were registered employing together seven male workers. Both of these required lime-washing, the ventilation of one was insufficient, and in one the w. c. was in a defective state.

Two workshops occupied by Braziers and Tinsmiths employing together six male workers, two by Tallow Chandlers employing five male workers, and four by Plumbers employing forty-two male workers were registered. In many of these lime-washing was required.

In all cases where defects were discovered, notice was given to the occupier to remedy the defect complained of, and in most cases the notice has been complied with, a few only pending where structural alterations were required, *e.g.*, where improvements in ventilation were necessary.

Two workshops occupied by Cycle Makers employing two male workers, two by Saddle and Harness Makers employing

twenty-three male and eleven female workers, and one used for the washing of bacon and employing two male workers were also registered. These were all found in a satisfactory condition.

As I have already stated the Act requires certain additional sanitary conditions to be fulfilled in the case of Bakehouses.

We have entered on the Register of Workshops sixteen Bakehouses. Of these nine belong to persons who carry on a retail business as baker and confectioner, one is what is contemplated in the Act, namely, a place where the occupier bakes bread for sale in his own shop; and six are public ovens, locally known as "bakehouses," to which people take their own bread to be baked who have no oven in their own houses. These "bakehouses" are usually worked by the occupier only, and, as the occupiers do not sell the bread, would appear, at first sight, not to come within the definition of a workshop. Inasmuch, however, as very many persons who retail bread send it to these "bakehouses" to be baked, I have thought it right to include them in the Register.

In these sixteen Bakehouses are employed three male and thirty-four female workers. In one of these there is a w.c. on the same floor as the bakehouse, communicating directly with it, which is contrary to the provisions of the Act. This will have to be remedied. Two are "underground" bakehouses within the meaning of the Act, and can not be occupied after January, 1904, without a certificate of suitability from the Town Council. In neither case ought a certificate to be granted. In one there is a sink in the cellar, in the other an unprotected soil-pipe of earthenware, and although the former is at present properly trapped and

the latter in good condition, with sound joints, these conditions alone would prevent a certificate of suitability being given, even if in other respects they were satisfactory, which is far from being the case.

In three cases where female workers were employed, and an abstract of the Act ought, therefore, to have been affixed, we found that this had not been done. The omission arose through ignorance on the part of the occupiers of the requirements of the Act, and when these were explained, they obtained and affixed the abstract. A list was also sent to the Factory Inspector for the district, not only of these cases, but also of all the workshops in the Borough, including those in which men only are employed. In these it is not compulsory under the Act to affix the abstract, but a special abstract has been prepared for them, and it was at the request of the Inspector that I sent him the complete list, in order that he might supply a copy of it and himself visit all the workshops, with many of which he had previously been unacquainted.

I append a Table (No. XI.) which shows at a glance the number of workshops of different kinds registered in the Borough, the number of male and female workers employed in each business, and the defects discovered on inspection.

I am, Gentlemen,

Yours obediently,

J. B. FISHER,

Medical Officer of Health.

To the Whitehaven Town Council.

TABLE I.—BIRTHS IN BOROUGH IN 1902.

Number of Births.	Birth-rate per 1000 per annum.
625	32·35

COMPARISON WITH TEN PREVIOUS YEARS.

1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.
33·98	29·00	28·47	33·73	32·78	28·96	31·81	30·05	31·06	35·45	32·35

TABLE II.—DEATHS AT ALL AGES.

Number of Deaths.	Death-rate.
396	20·49

COMPARISON WITH TEN PREVIOUS YEARS.

1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.
16·79	18·77	12·94	26·84	19·36.	16·27	19·07	17·31	23·49	20·54	20·49

TABLE III.—DEATHS UNDER ONE YEAR OF AGE.

Number of Deaths.	Death-rate per 1000 of population per annum.	Infant death-rate per 1000 Births Registered.
79	4·09	126·4

COMPARISON WITH TEN PREVIOUS YEARS.

	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.
Per 1000 of estimated Population.	4·60	4·22	2·57	6·26	4·52	3·47	5·28	4·35	5·59	4·97	4·09
Per 1000 Births Registered.	135·53	145·59	90·57	185·64	138·04	119·85	166·12	144·83	180	140·15	126·4

TABLE IV.—DEATHS UNDER FIVE YEARS OF AGE.

Number of Deaths.	Death-rate.
137	7·09

COMPARISON WITH TEN PREVIOUS YEARS.

1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.
6·57	7·11	3·57	13·73	7·57	5·85	7·97	6·11	11·33	6·98	7·09

TABLE V.—DEATHS OF PERSONS OVER SIXTY-FIVE YEARS OF AGE.

Number of Deaths.	Death-rate.
99	5·12

COMPARISON WITH TEN PREVIOUS YEARS.

1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.
3·65	3·72	2·89	4·21	3·94	2·59	3·83	3·11	4·14	4·29	5·12

TABLE VI.—DEATHS FROM EIGHT PRINCIPAL ZYMOTIC DISEASES IN 1902.

Smallpox	...	...	...	...	...	...	...	...	—
Measles	...	...	...	...	...	...	...	...	3
Scarlet Fever	...	...	...	...	...	...	...	...	3
Diphtheria	...	...	...	...	...	...	...	...	8
Whooping Cough	...	...	...	...	...	...	...	...	7
Typhus Fever	...	...	...	...	...	...	...	...	—
Enteric Fever	...	...	...	...	...	...	...	...	2
Diarrhoea	...	...	...	...	...	...	...	...	7
Total Number of Zymotic Deaths									30
Zymotic Death-rate per 1000 per annum									1·55

COMPARISON WITH TEN PREVIOUS YEARS.

1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.
0·56	2·05	0·42	6·52	2·21	1·24	1·76	2·07	5·69	1·81	1·55

TABLE VII.—OTHER CHIEF CAUSES OF DEATH
IN 1902.

Croup	...	...	...	...	...	...	4
Enteritis	...	...	...	...	...	...	5
Phthisis	...	...	...	...	...	...	28
Other Tubercular Diseases	...	...	...	...	...	...	23
Cancer—Malignant Disease	...	...	...	...	...	...	20
Bronchitis	...	...	...	...	...	...	64
Pneumonia	...	...	...	...	...	...	23
Other Diseases of Respiratory Organs	...	...	...	...	...	...	2
Alcoholism—Cirrhosis of Liver	...	...	...	...	...	...	6
Venereal Disease	...	...	...	...	...	...	1
Premature Birth	...	...	...	...	...	...	23
Diseases and Accidents of Parturition	...	...	...	...	...	...	3
Heart Disease	...	...	...	...	...	...	27
Accidents	...	...	...	...	...	...	18
Suicide	...	...	...	...	...	...	1
All other causes	...	...	...	...	...	...	118
							366
Eight Zymotic Diseases, as above	...	...	...	...	...	...	30
Total Deaths registered in the Borough in 1902	...	...	...	...	...	...	396

TABLE VIII.—CASES OF INFECTIOUS DISEASE
NOTIFIED DURING THE YEAR 1902.

NOTIFIABLE DISEASE.	CASES NOTIFIED IN WHOLE DISTRICT.								No. of Cases removed to Hospital.
	At all Ages.	Ages.							
		Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 65.	65 and up-wards.		
Smallpox	...	...	...	...	...	...	...	...	...
Cholera	...	...	...	...	...	..	...	...	...
Diphtheria	...	28	1	16	4	4	3	...	2
Membranous Croup	...	3	...	2	1	...	...	..	...
Erysipelas	...	12	1	1	1	...	8	1	...
Scarlet Fever	...	34	1	14	17	2	..	...	16
Typhus Fever	...	...	...	..	...	...	...	...	...
Enteric Fever	...	32	...	4	12	9	7	...	31
Relapsing Fever	...	...	...	...	..	...	...	...	...
Continued Fever	...	...	...	...	...	...	...	...	...
Puerperal Fever	...	...	...	...	...	...	...	...	...
Plague	...	...	...	...	...	...	...	...	...
Totals	...	109	3	37	35	15	18	1	49

Bransty Hospital for Infectious Diseases is situated within the Borough.

TABLE IX.—VITAL STATISTICS OF BOROUGH DURING 1902 AND PREVIOUS YEARS.

Year.	Popula- tion estimat'd to Middle of each Year.	Births.		Total Deaths Registered in the District.				Total Deaths in Public Institu- tions in the District.	Deaths of Non- resid'nts regis- tered in Public Institu- tions in the District.	Deaths of Resi- dents regis- tered in Public Institu- tions beyond the District.	Nett Deaths at all Ages belonging to the District.	
		No	Rate. *	Under 1 Year of age.		At all Ages.					No.	Rate. *
				No.	Rate per 1,000 Births regist'd	No.	Rate. *					
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.
1892.	17,800	605	33·98	82	135·53	299	16·79	7	5	...	294	16·51
1893.	18,000	522	29·	76	145·59	338	18·77	20	13	..	325	18·05
1894.	19,000	541	28·47	49	90·57	246	12·94	14	5	...	241	12·68
1895.	19,000	641	33·73	119	185·64	510	26·84	16	3	...	507	26·68
1896.	19,000	623	32·78	86	138·04	368	19·36	16	10	...	358	18·84
1897.	19,300	559	28·96	67	119·85	314	16·27	16	6	...	308	15·96
1898.	19,300	614	31·81	102	166·12	368	19·07	12	4	..	364	18·86
1899.	19,300	580	30·05	84	144·83	334	17·31	15	6	...	328	16·99
1900.	19,320	600	31·06	108	180	454	23·49	48	22	...	432	22·36
1901.	19,324	685	35·45	96	140·15	397	20·54	60	17	...	380	19·66
Averages for years 1892-1901	18,934·4	597	31·529	86·9	144·632	362·8	19·138	22·4	9·1	..	358·7	18·659
1902.	19,320	625	32·35	79	126·4	396	20·49	77	32	I	365	18·89

* Rates in columns 4, 8, and 13, calculated per 1,000 of estimated population.

NOTE.—The deaths to be included in Column 7 of this table are the whole of those registered during the year as having actually occurred within the district or division. The deaths to be included in Column 12 are the number in Column 7, corrected by the subtraction of the number in Column 10 and the addition of the number in Column 11.

By the term “Non-residents” is meant persons brought into the district on account of sickness or infirmity, and dying in public institutions there; and by the term “Residents” is meant persons who have been taken out of the district on account of sickness or infirmity, and have died in public institutions elsewhere.

The “Public Institutions” to be taken into account for the purposes of these Tables are those into which persons are habitually received on account of sickness or infirmity, such as hospitals, workhouses and lunatic asylums.

The Institutions within the District receiving sick and infirm persons from outside the District are (1)—Whitehaven and West Cumberland Infirmary; (2)—Whitehaven Union Workhouse.

The Institution outside the District receiving sick and infirm persons from the District is:—Toxteth Park Workhouse, Liverpool.

Bransty Hospital for Infectious Diseases receives only persons from the District.

Area of District in Acres	...	...	...	...	...	...	1,743
Total Population, at all ages	...	...	...	...	...	...	19,324
Number of Inhabited Houses	..	..	..	..	..	...	3,959
Average Number of Persons per house	...	...	...	...	...	...	4·88

At
Census
of 1901.

TABLE X.—CAUSES OF, AND AGES AT, DEATH
DURING YEAR 1902

Causes of Death.	Deaths in or belonging to whole District at subjoined Ages.							
	All Ages.	Under 1.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and up-wards.	Total Deaths in Public Institutions in the District
Smallpox	...	...	..	...	..	...	...	...
Measles	3	...	3	...	...	...	...	...
Scarlet Fever	3	...	3	...	..	...	...	2
Whooping Cough ...	7	3	4	...	...	...	...	...
Diphtheria and Mem- branous Croup...	8	...	7	...	...	I	...	...
Croup	4	I	3	...	...	...	..	...
Fever { Typhus	...	...	..	...	..	...	...	...
Enteric	2	...	..	...	I	I	...	2
Other continued ...	...	...	...	...	...	...	...	...
Epidemic Influenza ...	...	..	...	...	...	..	...	...
Cholera	...	...	..	...	...	...	...	...
Plague	...	...	...	...	...	...	...	...
Diarrhœa	7	6	I	...	...	..	...	...
Enteritis	4	2	I	..	...	I	...	2
Puerperal Fever ..	...	...	...	...	...	...	...	...
Erysipelas	...	...	...	...	...	...	...	...
Other Septic Diseases ..	2	..	...	I	..	...	I	...
Phthisis	26	..	..	I	12	12	I	4
Other Tubercular Diseases	21	5	7	2	3	4	...	2
Cancer, Malignant Disease	18	...	...	...	...	14	4	5
Bronchitis... ..	58	16	15	...	...	9	18	15
Pneumonia	23	5	7	2	...	6	3	..
Pleurisy	...	...	...	...	...	...	...	...
Other Diseases of Res- piratory Organs ...	2	I	...	...	...	I	...	...
Alcoholism } ...	6	...	...	..	...	4	2	4
Cirrhosis of Liver }	...	...	...	..	...	...	...	...
Venereal Diseases ...	I	I	...	...	...	...	...	...
Premature Birth ...	23	23	...	...	...	...	...	...
Diseases and Accidents of parturition	3	...	...	...	...	3	...	...
Heart Diseases	26	...	...	2	3	12	9	5
Accidents	14	..	I	I	I	9	2	8
Suicides	I	...	...	..	...	I	...	...
All other causes ..	103	16	3	4	2	34	44	28
All causes	365	79	55	13	22	112	84	77

TABLE XI.—Shewing the Number of Workshops Registered in the Borough of Whitehaven during the year 1902, the number of Persons employed, and the number and character of Sanitary Defects discovered on Inspection.

Nature of Business.	Number of Workshops	Number of Persons Employed.			Sanitary Defects Discovered on Inspection.				
		Male.	Female.	Total.	Want of Cleanliness	Need for Lime-washing.	Over-crowding.	Defective Ventilation.	Remarks.
Dressmakers and Milliners	17	...	103	103	...	...	5	2	{ Two Underground Bakehouses, one has W.C. on same floor.
Bakehouses	16	3	34	37	...	1	...	...	
Tailors	11	43	5	48	2	2	1	2	{ Two Defective and Dirty Water Closets. One Defective W.C. One Defective W.C.
Joiners	10	53	...	53	1	5	...	...	
Cloggers	10	26	...	26	...	...	...	2	{ Two Defective and Dirty Water Closets. One Defective W.C. One Defective W.C.
Shoemakers	2	7	...	7	...	2	...	1	
Cycle Makers	2	2	...	2	...	...	...	...	{ Two Defective and Dirty Water Closets. One Defective W.C. One Defective W.C.
Braziers and Tinsmiths	2	6	...	6	...	2	...	...	
Saddlers	2	23	11	34	...	...	...	...	{ Two Defective and Dirty Water Closets. One Defective W.C. One Defective W.C.
Tallow Chandlers	2	5	...	5	...	1	...	...	
Bacon Washer	1	2	...	2	...	...	...	...	{ Two Defective and Dirty Water Closets. One Defective W.C. One Defective W.C.
Plumbers	4	42	...	42	...	1	...	...	
Total	79	212	153	365	3	14	6	7	

SUMMARY OF SANITARY INSPECTOR'S REPORT FOR 1902.

Byres, Stables, and Slaughter Houses in Dirty and Insanitary Condition	8
Accumulations of Manure in connection with Stables and Cowsheds	7
Structurally Defective Middensteads in connection with Stables and Cowsheds	4
Nuisances caused by Pigs and Poultry	2
Defective and Choked Drains	28
„ Gully Traps in Courts and Yards	43
„ Paving and Channelling	61
„ Rain-water Spouts (28 disconnected from Sewer)	71
„ Water Supply	7
„ Water Taps and Pipes (Wasting Water)	23
„ Sink Connections	9
„ Bath Connections	1
„ Private Urinals	3
„ Ventilation of Houses (Opening Sashes provided)	40
„ Ashpits (one done away with)	2
W.C.'s in Insanitary Condition (Fittings defective, &c.)	98
Houses and Premises in Dirty and Insanitary Condition	22
Dwelling Houses Overcrowded	10
Number of Additional W.C.'s provided	21
Notices required for Lime-washing Slaughter Houses, Byres, and Stables	6
Notices required for Lime-washing of Courts	24
Smoke Nuisances from Factories	2
Miscellaneous Nuisances... ..	4
Ships Inspected (68 Foreign, 59 Home Ports)	127

